

***In the Specification***

Please amend the specification by changing the word "step" in page 30 line 32 to --means--.

A marked up paragraph showing the correction is just below.

**Marked up paragraph from page 30:**

D1  
The CL-F region and covering markers are for a species and the one or more individuals are members of the species. Means for determining information on the presence or absence of each allele of each bi-allelic marker of the group in chromosomal DNA includes any means of determination. Means for determining information on the presence or absence of each allele of each bi-allelic marker of the group in chromosomal DNA includes means comprising oligonucleotide technology by using a set of oligonucleotides that is complementary to the group as discussed below. Information on the presence or absence of each allele in the chromosomal DNA is obtained using a DNA specimen from each of one or more individuals of the sample or by using one or more DNA pools of DNA specimens from two or more individuals of the sample. Any apparatus that obtains genotype data or sample allele frequency data (similar to the data of the step d) of process #1) by determining the presence or absence of each allele of each bi-allelic marker of the group in the chromosomal DNA of one or more individuals is an example of this version of the invention. Versions of this apparatus also obtain a combination of genotype data and sample allele frequency data similar to the data of the step d) of process #1. The details of ~~step~~ means b) will be clear to those of ordinary skill in the art.

***In the Specification (continued)***

Please amend the specification, on page 6 line 10 insert the words -- Muller-Mysok & Abel (1997) independently made a similar observation, but they emphasized the weakness of TDT power when the m/p ratio departs from unity and  $\delta$  is not close to  $\delta_{max}$ --

A marked up paragraph showing the correction is just below.

**Marked up paragraph from page 6:**

published.<sup>11</sup> In this paper a general framework for determining the power of the TDT in many different situations is presented. The analysis of Risch and Merikangas<sup>8</sup> and others is shown by the inventor to be a special case of his general framework. His observations and calculations published in this paper have shown that the TDT has increased power in more common, less optimal situations as well as the less common, optimal situation cited by Muller-Myshok and Abel.<sup>9</sup> As opposed to the observation of Muller-Myshok and Abel, the inventor's calculations indicate that association tests such as the TDT have increased power in typical situations even when the ratio  $m/p$  departs significantly from unity and, or the linkage disequilibrium between the analyzed (marker) allele and disease polymorphism is only half its maximum possible value. The inventor arrived at these conclusions independently and did not derive them from others. Muller-Myshok & Abel (1997) independently made a similar observation, but they emphasized the weakness of TDT power when the  $m/p$  ratio departs from unity and  $\delta$  is not close to  $\delta_{max}$ .